



Well Name: NANCE 1; BHD

API #: 3004510310

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS2021227

Cust No: 35825-14000

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: NANCE 1; BHD

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation: DK

Cust. Stn. No.: 3004510310
20015

AREA 2 / RUN 0205

Heat Trace:

Remarks:

Source: BRADENHEAD

Well Flowing: Y

Pressure: PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 08/24/2021

Sample Time: 10.30 AM

Sampled By: JOHN RUSSELL

Sampled by (CO):

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	2.0896	2.0209	0.2300	0.00	0.0202
CO2	0.0262	0.0253	0.0040	0.00	0.0004
Methane	96.1402	92.9779	16.3270	971.02	0.5325
Ethane	1.0739	1.0386	0.2880	19.00	0.0111
Propane	0.4094	0.3959	0.1130	10.30	0.0062
Iso-Butane	0.1510	0.1460	0.0490	4.91	0.0030
N-Butane	0.0624	0.0603	0.0200	2.04	0.0013
I-Pentane	0.0288	0.0279	0.0110	1.15	0.0007
N-Pentane	0.0066	0.0064	0.0020	0.26	0.0002
Hexane Plus	0.0119	0.0115	0.0050	0.63	0.0004
Total	100.0000	96.7107	17.0490	1009.31	0.5761

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.002
 BTU/CU.FT IDEAL: 1011.6
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1013.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 996.1
 DRY BTU @ 15.025: 1034.0
 REAL SPECIFIC GRAVITY: 0.577

CYLINDER #: 4056
 CYLINDER PRESSURE: 50 PSIG
 ANALYSIS DATE: 09/09/2021
 ANALYSIS TIME: 10:30:07 AM
 ANALYSIS RUN BY: RICHARD WILSON

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 09/10/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	NANCE 1; BHD	BRADENHEAD	09/10/2021
Stn. No.:	3004510310	DK	35825-14000
Mtr. No.:	20015		

Smpl Date: 08/24/2021
Test Date: 09/09/2021
Run No: HS2021227

Nitrogen: 2.0896
CO2: 0.0262
Methane: 96.1402
Ethane: 1.0739
Propane: 0.4094
I-Butane: 0.1510
N-Butane: 0.0624
I-Pentane: 0.0288
N-Pentane: 0.0066
Hexane+: 0.0119

BTU: 1013.7
GPM: 17.0490
SPG: 0.5770



Well Name: NANCE 1; CSG

API #: 3004510310

Source: CASING

Sample Type: GAS

Analysis No: HS2021228

Cust No: 35825-14005

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: NANCE 1; CSG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation: DK

Cust. Stn. No.: 3004510310
20015

AREA 2 / RUN 0205

Heat Trace:

Remarks:

Source: CASING

Well Flowing: Y

Pressure: PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 08/24/2021

Sample Time: 10.30 AM

Sampled By: JOHN RUSSELL

Sampled by (CO):

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4299	0.4184	0.0470	0.00	0.0042
CO2	1.5079	1.4675	0.2580	0.00	0.0229
Methane	79.2610	77.1353	13.4850	800.54	0.4390
Ethane	10.2123	9.9384	2.7410	180.73	0.1060
Propane	4.4546	4.3351	1.2320	112.08	0.0678
Iso-Butane	0.7460	0.7260	0.2450	24.26	0.0150
N-Butane	1.3141	1.2789	0.4160	42.87	0.0264
I-Pentane	0.5456	0.5310	0.2000	21.83	0.0136
N-Pentane	0.4954	0.4821	0.1800	19.86	0.0123
Hexane Plus	1.0332	1.0055	0.4620	54.46	0.0342
Total	100.0000	97.3182	19.2660	1256.62	0.7414

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
 BTU/CU.FT IDEAL: 1259.5
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1264.3
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1242.3
 DRY BTU @ 15.025: 1289.6
 REAL SPECIFIC GRAVITY: 0.7439

CYLINDER #: 6041
 CYLINDER PRESSURE: 138 PSIG
 ANALYSIS DATE: 09/08/2021
 ANALYSIS TIME: 10:50:00 AM
 ANALYSIS RUN BY: RICHARD WILSON

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 09/10/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	NANCE 1; CSG	CASING	09/10/2021
Stn. No.:	3004510310	DK	35825-14005
Mtr. No.:	20015		

Smpl Date: 08/24/2021
Test Date: 09/08/2021
Run No: HS2021228

Nitrogen: 0.4299
CO2: 1.5079
Methane: 79.2610
Ethane: 10.2123
Propane: 4.4546
I-Butane: 0.7460
N-Butane: 1.3141
I-Pentane: 0.5456
N-Pentane: 0.4954
Hexane+: 1.0332

BTU: 1264.3
GPM: 19.2660
SPG: 0.7439



Well Name: NANCE 1; TBG

API #: 3004510310

Source: TUBING

Sample Type: GAS

Analysis No: HS2021229

Cust No: 35825-14010

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: NANCE 1; TBG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation: DK

Cust. Stn. No.: 3004510310
20015

AREA 2 / RUN 0205

Heat Trace:

Remarks:

Source: TUBING

Well Flowing: Y

Pressure: PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 08/24/2021

Sample Time: 10.30 AM

Sampled By: JOHN RUSSELL

Sampled by (CO):

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3937	0.3847	0.0430	0.00	0.0038
CO2	1.7577	1.7175	0.3010	0.00	0.0267
Methane	79.1940	77.3812	13.4720	799.86	0.4387
Ethane	10.5136	10.2730	2.8210	186.06	0.1092
Propane	4.3191	4.2202	1.1940	108.67	0.0658
Iso-Butane	0.6776	0.6621	0.2230	22.03	0.0136
N-Butane	1.1815	1.1545	0.3740	38.54	0.0237
I-Pentane	0.4735	0.4627	0.1740	18.94	0.0118
N-Pentane	0.3859	0.3771	0.1400	15.47	0.0096
Hexane Plus	1.1034	1.0781	0.4940	58.16	0.0365
Total	100.0000	97.7111	19.2360	1247.75	0.7393

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
 BTU/CU.FT IDEAL: 1250.6
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1255.3
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1233.5
 DRY BTU @ 15.025: 1280.4
 REAL SPECIFIC GRAVITY: 0.7418

CYLINDER #: 4039
 CYLINDER PRESSURE: 66 PSIG
 ANALYSIS DATE: 09/08/2021
 ANALYSIS TIME: 10:43:52 AM
 ANALYSIS RUN BY: RICHARD WILSON

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 09/10/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	NANCE 1; TBG	TUBING	09/10/2021
Stn. No.:	3004510310	DK	35825-14010
Mtr. No.:	20015		

Smpl Date: 08/24/2021
Test Date: 09/08/2021
Run No: HS2021229

Nitrogen: 0.3937
CO2: 1.7577
Methane: 79.1940
Ethane: 10.5136
Propane: 4.3191
I-Butane: 0.6776
N-Butane: 1.1815
I-Pentane: 0.4735
N-Pentane: 0.3859
Hexane+: 1.1034

BTU: 1255.3
GPM: 19.2360
SPG: 0.7418

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District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 48776

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 48776
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	10/13/2021